

Weekly NSF Funding Opportunities and News Items

March 21, 2008

- **Webinar: Preparing Evaluation Plans for CCLI Proposals**

Apr 1 2008 11:00AM to Apr 3 2008 5:30PM

URL will be e-mailed to registrants

With the assistance of SRI International, a non-profit institute specializing in evaluation, NSF is sponsoring an informative online forum for understanding how to prepare sound evaluation plans for Phase I project proposals to NSF's Course, Curriculum, and Laboratory Improvement (CCLI) program.

Full announcement:

http://www.nsf.gov/events/event_summ.jsp?cntn_id=111244&govDel=USNSF_13

- **Antarctic Artists and Writers Program**

The purpose of the Antarctic Artists and Writers Program is to enable serious writings and works of art that exemplify the Antarctic heritage of humankind. In particular, the program seeks to increase public understanding of the Antarctic region, including the continent and the surrounding oceans, as well as the associated research and education endeavors.

The Antarctic Artists and Writers Program provides opportunities for professional artists and writers to travel to Antarctica --- at research stations, field camps, and aboard ships --- to make the observations necessary to complete their proposed projects. While the majority of award recipients are established artists and writers, the program also seeks to support early career artists and writers in an effort to broaden participation.

Full announcement:

http://www.nsf.gov/pubs/2008/nsf08552/nsf08552.htm?govDel=USNSF_25

- **Centers for Chemical Innovation Phase I (CCI-I) Formerly known as Chemical Bonding Centers (CBC) (NSF 08-536)**

The CCI Program is designed to support the formation of centers that can address major, long-term basic chemical research problems that have a high probability of both producing transformative research and leading to innovation. Appropriate research problems are high-risk but potentially high-impact and will attract broad scientific and public interest. Centers are expected to be agile structures that can respond rapidly to emerging opportunities and make full use of cyberinfrastructure to enhance collaborations. Center teams may include researchers from disciplines other than Chemistry and from academia, industry, government laboratories and international organizations. CCIs are expected to integrate research, education, and outreach and to include a plan to broaden participation to under-represented groups. Proposals should contain a compelling strategy for achieving demonstrable impact in all of these areas.

Full announcement: <http://www.nsf.gov/pubs/2008/nsf08536/nsf08536.htm>

News and Articles of Interest

- **Tell Them Where it Hurts**

Statue of David lends perfect form to new method for modeling strain in both inanimate and human structures

http://www.nsf.gov/news/news_summ.jsp?cntn_id=111276&govDel=USNSF_51

- **Secrets of Plant Genomes Revealed!**
 Plant genome research is already revolutionizing the field of biology. Currently, scientists are unlocking the secrets of some of the most important plants in our lives, including corn, cotton and potatoes.
http://www.nsf.gov/news/mmg/mmg_disp.cfm?med_id=61504
- **Countering an Approaching Water Crisis**
 As growing demand for clean water stretches even the resources of the world's largest industrialized nations, scientists and engineers are turning to new technology and novel ideas to find solutions.
http://www.nsf.gov/news/news_summ.jsp?cntn_id=111305&govDel=USNSF_51
- **Contact Lenses With Circuits**
 Contact lenses with metal connectors for electronic circuits were safely worn by rabbits in laboratory tests at the University of Washington (UW).
 A virtual display like this could be used by drivers or pilots to see a vehicle's speed projected onto the windshield; by video-game companies who could use the contact lenses to completely immerse players in a virtual world without restricting their range of motion; or, in the field of communications, by people on the go who could surf the Internet on a midair virtual display screen that only they would be able to see.
http://www.nsf.gov/news/mmg/mmg_disp.cfm?med_id=62145
- **Stainless Steel Microneedles**
 Researchers at Georgia Institute of Technology and Emory University are studying the use of microneedle arrays as an alternative to traditional hypodermic needles for delivering flu vaccine. The tiny needles are too small to significantly stimulate nerve endings in the skin, so they can be applied without causing pain. Researchers envision that microneedle patches, coated with a powdered form of the vaccine, could be mailed to persons who need the immunization, thus eliminating the need to visit a medical facility. The microneedle arrays can also be used to deliver other drugs and vaccines.
http://www.nsf.gov/news/mmg/mmg_disp.cfm?med_id=62132
- **"Nanominerals" Influence Earth Systems from Ocean to Atmosphere to Biosphere**
 The ubiquity of tiny particles of minerals--mineral nanoparticles--in oceans and rivers, atmosphere and soils, and in living cells are providing scientists with new ways of understanding Earth's workings. Our planet's physical, chemical, and biological processes are influenced or driven by the properties of these minerals.
http://www.nsf.gov/news/news_summ.jsp?cntn_id=111279&govDel=USNSF_57
- **At the Crossroads of Stem Cells and Computer Science**
 A Rutgers University graduate student takes readers on a journey from Piscataway, New Jersey, to Hsinchu, Taiwan, and shares some experiences with East-West collaboration, stem cell sorting and computer science
http://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=111169&govDel=USNSF_1
- **Giraffe Petroglyphs**
 Two giraffe petroglyphs, slightly larger than life-size, were carved on red sandstone rock about 6000 years ago. Hundreds of the animals are engraved on a gently sloping rock face, known as Dabous Rock, located north of Agadez in Niger in the Air Mountains.
http://www.nsf.gov/news/mmg/mmg_disp.cfm?med_id=62137

- **Newly Discovered Active Fault**

The Dalmatian Islands represent a growing fold-and-thrust belt that is rising from the Adriatic Sea. The newly identified fault, which runs under the Adriatic Sea, is actively building more of the Dalmatian Islands and Dinaride Mountains of Croatia.

http://www.nsf.gov/news/mmg/mmg_disp.cfm?med_id=62141

- **New Species Found in Mysteriously Diverse Jungle**

Louisiana State University's Chris Austin describes his work studying the diversity of life on the island of New Guinea

http://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=111168&govDel=USNSF_1

- **"Vote of Confidence?"**

Electronic voting technology easily passes the tests of voter confidence and satisfaction, but users still make too many mistakes, says a major new study

http://www.nsf.gov/news/mmg/mmg_disp.cfm?med_id=62117